

behaviour made by J. M. E. Vielliard and W. R. Silva are available in Hardy *et al.* (1989).

Comparative reproductive behaviour of the neotropical long-tailed nightjars (*Hydropsalis*, *Uropsalis* and *Macropsalis*) would be worth studying as this group's behaviour and ecology are mostly unknown, and would make favourable material from an evolutionary standpoint.

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Imperial eagles

by J. G. Parker

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Gonzalez *et al.* (1989, *Bull. Brit. Orn. Cl.* 109: 86–93) contend that the Eastern Imperial Eagle *Aquila heliaca* and the Spanish Imperial Eagle *A. adalberti* had contiguous breeding ranges in the 19th century. However, the evidence they adduce, albeit assiduously compiled and carefully collated, does not satisfactorily substantiate this hypothesis, and their premise that lack of known or reported hybrids is evidence for the specific distinction of the 2 forms, is not therefore valid.

Their map (p.90) indicates that, in the 19th century, at least 200 km separated the proven breeding range of *adalberti* in Iberia and Morocco from the postulated breeding areas of *heliaca* in France, Spain and Algeria, and by a much wider gap from the nearest recognised range of *heliaca* in Austro-Hungary and Greece.

A mere 2 clutches taken in southern France and northeastern Spain have been traced and these prove nothing save that, like many other avian species, Imperial Eagles may occasionally breed far beyond the normal

range. Evidence for the regular breeding of any form of Imperial Eagle in these areas is lacking; in addition the few specimens traced indicate that the species was, in fact, always of only exceptional occurrence.

Various authors cited state that Imperial Eagles did breed in these areas, but neither the reliability of these observations nor their sources are apparently assessed. As an example of the need for caution, Moll (1957), cited by Bannerman & Bannerman (1983), claims that the otherwise unrecorded Common Buzzard *Buteo buteo* is found throughout the year in Menorca, whereas my personal knowledge of the island and Moll's work leaves me in no doubt that he had misidentified the still abundant Booted Eagles *Hieraaetus pennatus*. Dresser (1873) is quoted as an authority for the occurrence of *heliaca* in France; however, he merely cites a French work published 4 years before *adalberti* was described.

That specimens of the migratory *heliaca* have been taken in France is no evidence of breeding. From Gonzalez *et al.*'s map it appears that *heliaca* is known to have occurred in France no more often, indeed, than the Greater Spotted Eagle *A. clanga* in Britain, i.e. some 12 times (Snow 1971), without promoting any even tentative conclusions that it might therefore breed.

The suggestion that the information regarding Imperial Eagles breeding in Algeria points to *heliaca* seems unjustified. Loche (1867) attributed specimens he examined to *heliaca*, but may well not have known that the 2 forms had been separated when he actually wrote (he had taken one of the last 2 known Algerian clutches 8 years before). Tristram's (1860) description of an Imperial Eagle in Algeria "who plainly exhibited the white feathers of the shoulder" could well apply to *adalberti*, not *heliaca*; Vaurie (1965) writes that *adalberti* "Differs from nominate *heliaca* . . . by having "white shoulders".", whereas Etchecopar & Hue (1967) state that the species is "Dark plumaged with some white (a) on scapulars alone in the east, (b) on scapulars and shoulders in the west".

For the above reasons, the conclusion of Gonzalez *et al.* that the breeding range of the Eastern and Spanish Imperial Eagles were in contact, is not justified on the known facts.

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